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## Research Powers the Future

**November 2001** 

## **CALIFORNIA'S FUTURE LOOKING BRIGHT WITH BERKELEY LAMP!**

The new Berkeley Lamp will revolutionize the way Californians light up their homes and of fices.

Based on four
years of research in
the Lawrence
Berkeley National
Laborator y with
funding suppor t
from the California
Energy
Commission's
Public Interest
Energy Research
(PIER) pr ogram

and the Depar tment of Ener gy, this new lamp is a shining example of energy efficiency and po werful lighting. The light is warm and soft, the design is classy and pr actical, and the light radiance is astonishing. Better yet, the Berkeley Lamp uses up to 70% less ener gy than incandescent or halog en lights.

Flexible and easy-to-use, the Berkeley Lamp is a dual lamp set with two independently controllable and fully dimmable compact



The Berkeley Lamp produces more light, less heat and uses less power than conventional lamps.

fluor escent lamps. One lamp is pointed do wnward for lighting the task ar ea. The other lamp filters light upward providing indirect lighting ideal for office and home environments with computer s. You can adjust the light intensity and the direction and the strength of either lamp to suit your needs.

## **MORE LIGHT, LESS COST**

"The Berkeley Lamp of fers great energy savings potential, generating more light but using less heat and less po wer than conventional lamps", said Michael Siminovitch, LBNL engineer. "It provides the same amount of light as a 300-w att halogen lamp and a 150-w att incandescent lamp, yet uses only one-quar ter of the energy."

For the typical homeowner, this would mean a sa vings of about \$20-\$30 ay ear in electricity costs for a lamp illuminated 3

hours a day. At the office, the savings are similar, and computer users can avoid the overhead glar e of fluorescent light systems by turning on the Berkeley Lamp instead.

If the Berkeley Lamp replaced a halogen torchiere lamp – the tall floor lamps with bo wl tops that provide upward lighting – users would not only enjoy energy savings, but would also a void the potential fire dangers of halogen lamps when the y tip over. Unlike halogen lamps, the Berkeley Lamp is cool to the touch, making it much safer.

(Cont.)



**GRAY DAVIS, Governor** 

The Resources Agency of California • MARY D. NICHOLS, Secretary

California Energy Commission • WILLIAM J. KEESE, Chairman • MICHAL C. MOORE, Commissioner

ROBERT A. LAURIE, Commissioner • ROBERT PERNELL, Commissioner • ARTHUR H. ROSENFELD, Commissioner

STEVE LARSON, Executive Director







LBNL scientist Michael Siminovitch with the innovative Berkely Lamp

What's the cool, sleek Berkeley Lamp worth to California? Plenty. If the Berkeley Lamp enjoyed the same market success of other conventional lamps, then the electricity savings would be immense – enough to supply 75,000 to 150,000 households during peak electricity hours. That's 100 to 200 megawatts, and one megawatt is enough to power roughly 750 homes.

Since commer cial and r esidential lighting combines for 22% of Calif ornia's electricity consumption, the potential po wer savings from widespread use of the Berkeley Lamp could be enor mous.

The Berkeley Lamp project is just one of the energy research projects at the Lawrence Berkeley National Laboratory conducted in part with PIER's support. Established in 1998, the PIER Program conducts energy research and develops environmentally sound, safe, and affordable products for California. PIER, part of the California Energy Commission, is dedicated to strengthening California's economy by delivering energy efficient solutions to the marketplace.

## A LAMP TO SHOW THE WAY

"We are most excited about the commercial sector's potential for saving power and operating costs by using the Berkeley Lamp," said California Energy Commissioner Art Rosenfeld. "Imagine if hotels, hospitals and offices replaced their conventional overhead and task lamps with Berkeley Lamps. The benefit to the state and all its citizens would be phenomenal."

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